

**Claim Amendment Summary****Claims pending**

- At time of the Action: Claims 1-18, 42, 45, and 48.
- After this Response: Claims 1-18, 42, 45, and 48.

**Canceled or Withdrawn claims:** 19-41, 43-44, 46-47 and 49-50.

**Amended claims:** 1, 16, 17, 42, 45, and 48.

**New claims:** none.

1. (CURRENTLY AMENDED) A method of serializing an object, the method comprising:

generating an envelope relating to the object;

generating a data structure ("datastruct") element embodied in one or more computer-readable media, the datastruct element being representative of a data structure of a first object, the datastruct element having a pair of datastruct tags, wherein the datastruct tags identify the datastruct element;

generating contents of the datastruct element between the datastruct tags, the contents comprising one or more data parameter elements representative of one or more data parameters of the first object's data structure, each parameter element having a pair of parameter tags associated therewith, wherein each pair of parameter tags identifies a parameter element with which the pair of tags is associated, each parameter element having associated data between the pair of parameter tags;

wherein the datastruct element and the contents are contained within the envelope.

2. (ORIGINAL)A method as recited in claim 1, wherein the contents further comprise at least one object reference referencing a second object within the data structure of the first object without including the second object within the contents of the datastruct element.

3. (ORIGINAL)A method as recited in claim 2, wherein the second object is the first object.

4. (ORIGINAL)A method as recited in claim 1, wherein the contents comprises a datatype definition for at least one data parameter element.

5. (ORIGINAL)A method as recited in claim 1, wherein the contents comprises a reference to a datatype definition for at least one data parameter element.

6. (ORIGINAL)A method as recited in claim 1, wherein at least one of the pair of datastruct tags comprises a datatype definition for at least one data parameter element.

7. (ORIGINAL)A method as recited in claim 1, wherein at least one of the pair of datastruct tags comprises a reference to a datatype definition for at least one data parameter element.

8. (ORIGINAL) A method as recited in claim 1, wherein at least one of a pair of parameter tags comprises a datatype definition for associated data between the parameter tags.

9. (ORIGINAL) A method as recited in claim 1, wherein at least one of a pair of parameter tags comprises a reference to a datatype definition for associated data between the parameter tags.

10. (ORIGINAL) A method as recited in claim 1, wherein the datastruct element and its contents are encoded using XML.

11. (ORIGINAL) A method as recited in claim 1 further comprising:  
inserting the datastruct element into a message; and  
sending the message to an entity on a network.

12. (ORIGINAL) A method as recited in claim 11 further comprising:  
formatting the message for sending over a network using HTTP;  
sending the message to an entity on the network by using HTTP.

13. (ORIGINAL) A method as recited in claim 11 further comprising:  
binding the message into a HTTP request;  
sending the message to an entity on the network by using HTTP.

14. (ORIGINAL) A method as recited in claim 1, wherein a data parameter element has the following format:

<parameter\_label> parameter\_data </parameter\_label>

the <parameter\_label> being one of the pair of parameter tags, the </parameter\_label> being the other of the pair of parameter tags, and the parameter\_label identifying the data parameter element;

the parameter\_data being the data associated with the parameter element identified by the parameter\_label.

15. (ORIGINAL)A computer-readable storage medium having computer-executable instructions that, when executed by a computer, performs the method as recited in claim 1.

16. (CURRENTLY AMENDED) A method of serializing an object, the method comprising:

~~generating a data structure ("datastruct") element having a pair of datastruct tags encoded in XML, wherein the datastruct tags identify the datastruct element;~~

~~generating contents of the datastruct element between the datastruct tags, the contents comprising one or more data parameter elements, each having a pair of parameter tags associated therewith and encoded in XML, wherein each pair of parameter tags identifies a parameter element with which the pair of tags is associated, each parameter element having associated data between the parameter tags.~~

generating a data structure ("datastruct") element embodied in one or more computer-readable media, the datastruct element being representative of a data structure of a first object, the datastruct element having a pair of datastruct tags, wherein the datastruct tags identify the datastruct element;

generating contents of the datastruct element between the datastruct tags, the contents comprising one or more data parameter elements representative of one or more data parameters of the first object's data structure, each parameter element having a pair of parameter tags associated therewith, wherein each pair of parameter tags identifies a parameter element with which the pair of tags is associated, each parameter element having associated data between the pair of parameter tags; and,

encoding a global attribute that indicates serialization rules utilized in the acts of generating.

17. (CURRENTLY AMENDED) A method of serializing an object, the method comprising:

generating a data structure ("datastruct") element embodied in one or more computer-readable media, the datastruct element being representative of a data structure of a first object, the datastruct element having a pair of datastruct tags, wherein the datastruct tags identify the datastruct element;

generating contents of the datastruct element between the datastruct tags, the contents comprising at least one object reference referencing a second object within the data structure of the first object without including the second object within the contents of the datastruct element; and

encoding a global attribute that indicates serialization rules utilized in the acts of generating.

18. (ORIGINAL)A method as recited in claim 17, wherein the second object is the first object.

Claims 19-41 are NON-ELECTED AND THUS CANCELED.

42. (CURRENTLY AMENDED) A computer-readable storage medium having computer-executable instructions that, when executed by a computer, performs a method of formatting a message for exchange between entities on a network, the method comprising:

~~generating a data structure ("datastruct") element representative of a data structure of a first object, the datastruct element having a pair of datastruct tags, wherein the datastruct tags identify the datastruct element;~~

~~generating contents of the datastruct element between the datastruct tags, the contents comprising one or more data parameter elements representative of one or more data parameters of the first object's data structure, each parameter element having a pair of parameter tags associated therewith, wherein each pair of parameter tags identifies a parameter element with which the pair of tags is associated, each parameter element having associated data between the parameter tags.~~

generating an envelope relating to the object;

generating a data structure ("datastruct") element embodied in one or more computer-readable media, the datastruct element being representative of a data structure of a first object, the datastruct element having a pair of datastruct tags, wherein the datastruct tags identify the datastruct element;

generating contents of the datastruct element between the datastruct tags, the contents comprising one or more data parameter elements representative of one or more data parameters of the first object's data structure, each parameter element having a pair of parameter tags associated therewith, wherein each pair of parameter tags identifies a parameter element with which the pair of tags is associated, each parameter element having associated data between the pair of parameter tags;

wherein the datastruct element and the contents are contained within the envelope.

43. (CANCELED)

44. (CANCELED)

45. (CURRENTLY AMENDED) An apparatus comprising:  
a processor;  
an object serializer executable on the processor to:

generate a data structure ("datastruct") element  
representative of a data structure of a first object, the datastruct  
element having a pair of datastruct tags, wherein the datastruct  
tags identify the datastruct element;

generate contents of the datastruct element between the  
datastruct tags, the contents comprising one or more data  
parameter elements representative of one or more data parameters  
of the first object's data structure, each parameter element having  
a pair of parameter tags associated therewith, wherein each pair  
of parameter tags identifies a parameter element with which the  
pair of tags is associated, each parameter element having  
associated data between the parameter tags; and

encode a global attribute that indicates serialization rules  
utilized in the acts of generating.



46. (CANCELED)

47. (CANCELED)

48. (Currently amended) A data structure for use with a computer having a processor and a memory, said structure comprising an envelope relating to an object and containing one or more data parameter elements, each parameter element having a pair of parameter tags associated therewith and encoded in XML, wherein each pair of parameter tags identifies a parameter element with which the pair of tags is associated, each parameter element having associated data between the parameter tags.

49. (CANCELED)

50. (CANCELED)